



# Analysis of Indonesia's Nutritional Status Survey Results 2021–2022: Trend of Stunting Prevalence Rates in the Provinces of South Sumatera and Bengkulu Towards a National Target of 14% in 2024

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## Article Information:

Received June 2, 2023

Accepted June 4, 2023

Accepted June 14, 2023

## Keywords:

Prevalence; Stunting; Nutrition Status Survey; SSGI; Sumatera Selatan; Bengkulu

## Abstract

This paper aims to examine the development trend of the prevalence of stunting in the provinces of South Sumatra and Bengkulu between 2021-2022, by exploring the PB/U and TB/U indicators to see trends in the prevalence of stunting in regencies and cities in the two provinces. The study method uses a secondary data analysis approach to the results of the Indonesian Nutrition Status Survey which will be conducted from 2021 to 2022, using descriptive statistical analysis. The sample studied was the results of a nutritional status survey in the Provinces of South Sumatra and Bengkulu in 27 urban districts. The results of the study in general show that there has been a decline in the stunting prevalence rate from 2021-2022 in the South Sumatra Province by 6.2% and the Bengkulu Province by 2.3%. However, if we look at the figures per district/city, there is one district in South Sumatra Province which has experienced an increase in the prevalence of stunting, namely Banyu Asin by 2.8% and there are five districts in Bengkulu Province which have also experienced an increase in the prevalence of stunting, namely Kepahiang by 2%, South Bengkulu 2.4%, North Bengkulu 2.1%, Mukomuko 0.1%, Kaur 1.1%. Based on the results above, it can be concluded that the prevalence of stunting in the provinces of South Sumatra and Bengkulu in general has decreased, but there are 6 districts in the two provinces that are still experiencing an increase in the prevalence of stunting. It is suggested to the competent authorities in the 6 regencies to improve specific nutrition interventions and sensitive nutrition interventions by means of convergence between regional apparatus organizations (OPD) through the Team for the Acceleration of Stunting Reduction (TPPS) in each city-district.

## A. Introduction

The agenda for developing quality human resources is a pillar of the Indonesia Vision 2045 policy, namely Indonesian people who have high intelligence, uphold pluralism, are cultured, religious, and uphold ethical values. So, it is important to overcome various problems related to preparing quality human resources to achieve Indonesia's Vision 2045 and catch up and have an equal position and strong competitiveness in the

international world. In the context of developing the quality of human resources, the problem of stunting which is one part of the double burden of malnutrition (DBM) has a very detrimental impact both in terms of health and economic productivity and in the short and long term. provision. The double burden of malnutrition, defined as the simultaneous manifestation of both undernutrition and overweight and obesity, affects most low-income and middle-income countries (LMICs) (Popkin et al., 2020). In the short term, stunting is related to the development of brain cells which will eventually cause the level of intelligence to not be optimal. This means that children's cognitive abilities in the long run will be lower and ultimately reduce productivity and hinder economic growth.

Toddler age is an age that is prone to various diseases and nutritional problems (Nugroho et al., 2021). Stunting is a nutritional status based on the PB/U or TB/U index where in anthropometric standards for assessing children's nutritional status, the measurement results are at the threshold (Z -Score) -2 SD to -3 SD (stunted) and -3 SD (severely stunted). Stunting is one of the nutritional problems that the Government of Indonesia is focusing on (Rahmadhita, 2020). Stunting is linked to a higher risk of morbidity and mortality, diminished physical ability, and poorer motor and mental function development in children. However, because not all facets of society have been included, the government's efforts through the Integrated Health Center (Posyandu) have not been as successful as they could have been. Due to their intimate ties to mothers and the community, cadres and traditional birth attendants are an integral part of the community that is strategically essential enough to be involved in this activity (Martha et al., 2020).

To see the prevalence of stunting in Indonesia, the Health Development Policy Agency of the Ministry of Health of the Republic of Indonesia conducted a national scale survey, namely the Indonesian Nutrition Status Survey (SSGI) which provides an overview of the nutritional status of toddlers (stunting, wasting, underweight, overweight) and its determinants include indicators of specific nutritional interventions and interventions. sensitive nutrition using a two-stage stratified sampling method with a cross-sectional approach. The number of samples is 334,848 infants and toddlers. Data collection in 486 districts/cities in 33 provinces in Indonesia. Data collection was carried out through anthropometric measurements (weight, length/height of toddlers, LiLA of young women, women of childbearing age & pregnant women) using standardized tools and interviews. The basic implementation of SSGI is: (1). PERPRES No. 18 of 2020 concerning the 2020-2024 National Medium-Term Development Plan, (2). PERPRES No. 72 of 2021 concerning Accelerating the Reduction of Stunting (3). Letter of Set of Vice President No. B.470/KSNB/SWP/PKM.00/07/2021 concerning the implementation of SSGI in 2022 and (4). Bappenas Letter No. 030007/PP.03.02/D.5/T/3/2022 regarding the urgency of SSGI implementation by the Ministry of Health (Kemenkes RI, 2022).

Some of the indicator variables that were carried out in research on SSGI consisted of specific nutritional indicators and sensitive nutritional indicators. The specific nutritional indicators consist of: antenatal care, complete routine and basic immunization, monitoring of toddler growth, blood supplement tablets for pregnant women and young girls, access to seeking treatment for sick toddlers, administration of deworming drugs, provision of additional food for toddlers and pregnant women . Meanwhile, sensitive nutrition indicators consist of: access to proper sanitation, health insurance, early childhood education (PAUD), family planning, social assistance (PKH, BPNT, BLT, etc.), healthy homes, family food security, diversity of toddler food (Kemenkes RI, 2022).

In order to prevent stunting, especially in toddlers, the government is implementing the Nutrition Improvement Acceleration Program with the First 1000 Days of Life Movement (Ruaida, 2018). Two sizable categories are part of the stunting problem intervention itself: sensitive efforts and specific efforts. The health sector's handling of stunting in children during their first 1000 days of life (HPK), which is routinely done, is a specific effort. This intervention's duration is brief. For instance, giving pregnant women with chronic energy deficit (KEK), exclusive breastfeeding, vitamin A, deworming, and other conditions extra meals. Meanwhile, sensitive intervention initiatives are interventions that are long-term in character and targeted towards a variety of development activities, typically outside the health sector.

The provinces of South Sumatra and Bengkulu are included in the provinces that will be the locations for the Indonesian Nutrition Status Survey in 2021 and 2022. These two provinces are located in the southern part of the island of Sumatra (Sumbagsel). The number of urban districts in the two provinces is 27 urban districts. The central government is targeting a reduction in the prevalence of stunting to 14% in 2024, while according to the SSGI 2022 results the prevalence of stunting in the Provinces of South Sumatra and Bengkulu is still above 14%. This study aims to see the trend of decreasing stunting prevalence based on the SSGI results for 2021-2022 in the two provinces and how efforts are being made to achieve the target of stunting prevalence of 14% in 2024.

## B. Research Methods

The study method in this study uses a secondary data analysis approach using descriptive statistical analysis. The secondary data used is SSGI data for 2021 and 2022 in the Provinces of South Sumatra and Bengkulu in 27 urban districts and focuses on the results of the PB/U and TB/U indicators with a sample of toddlers aged 0-59 months to see the prevalence of stunting toddlers in the two provinces, then a descriptive statistical analysis was carried out using tables and diagrams to provide an overview of the data at the research locus.

## C. Result and Discussion

The Indonesian Nutritional Status Survey is a national-scale health survey conducted by the Indonesian Ministry of Health in all regions of Indonesia. This survey aims to describe the nutritional status of children aged 0-59 months (stunting, wasting, underweight, overweight) using the indicators BB/TB, BB/E, PB/A and TB/A. Enumerators used a questionnaire tool to obtain data by interviewing participants, utilizing observational techniques, and measuring the target anthropometrically. The documentation of the data collection tasks completed by enumerators in the field is as follows:



**Figure 1.** Anthropometric Measurements by SSGI Enumerators

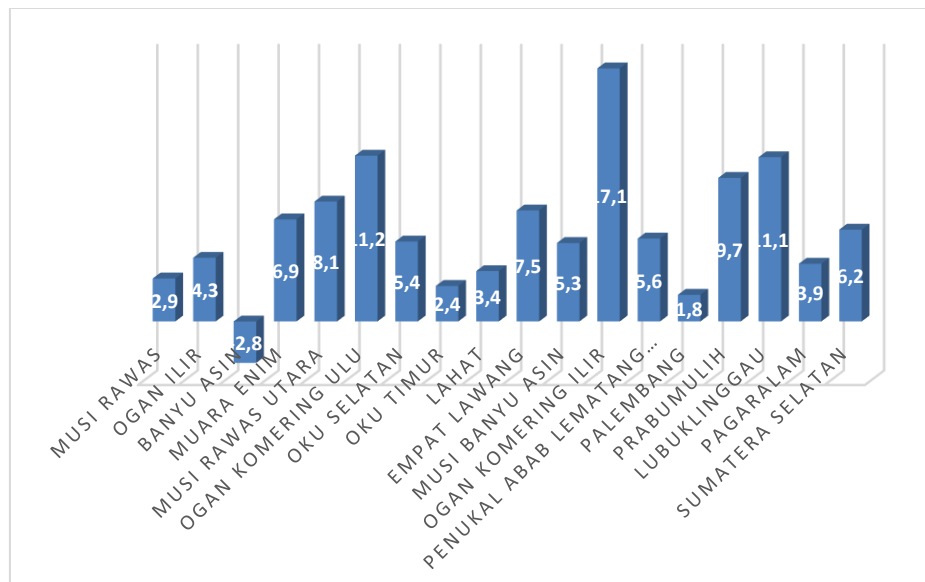
The following is the trend of stunting prevalence in South Sumatra Province for 2021-2022, which consists of data per city district and provincial data as follows:

**Table 1.** Stunting Prevalence Trend in South Sumatra Province

No	Regency/City	Prevalence Trends		
		2021 (%)	2022 (%)	Decrease/Increase Amount (%)
1	Musi Rawas	28,3	25,4	2.9
2	Ogan Ilir	29,2	24,9	4.3
3	Banyu Asin	22,0	24,8	-2.8
4	Muara Enim	29,7	22,8	6.9
5	Musi Rawas Utara	28,3	20,2	8.1
6	Ogan Komering Ulu	31,1	19,9	11.2
7	OKU Selatan	24,8	19,4	5.4
8	OKU Timur	21,5	19,1	2.4
9	Lahat	22,4	19,0	3.4
10	Empat Lawang	26,0	18,5	7.5
11	Musi Banyu Asin	23,0	17,7	5.3

No	Regency/City	Prevalence Trends		
		2021 (%)	2022 (%)	Decrease/Increase Amount (%)
12	Ogan Komering Ilir	32,2	15,1	17.1
13	Penukal Abab Lematang Ilir	20,2	14,6	5.6
14	Palembang	16,1	14,3	1.8
15	Prabumulih	22,0	12,3	9.7
16	Lubuklinggau	22,8	11,7	11.1
17	Pagaralam	15,5	11,6	3.9
	<b>Sumatera Selatan</b>	24,8	18,6	6.2

From the data above it is known that in 2022 there will be a decrease in the prevalence of stunting in urban districts in South Sumatra Province. The highest reduction in stunting prevalence was Ogan Komering Ilir District with a decrease of 17.1% and the lowest prevalence reduction was Palembang City with 1.8%. However, the prevalence rate of stunting in the two urban regencies still has not reached the target of <14%, namely Ogan Komering Ilir Regency with 15.1% and Palembang City with 14.3%. Meanwhile, the prevalence rate for stunting in urban regencies that have reached the target of <14% is Prabumulih City with 12.3%, Lubuklinggau City with 11.7% and Pagaralam City with 11.6%.



**Figure 2 .** Magnitude of Increase/Decrease in Stunting Prevalence Rates in South Sumatra Province

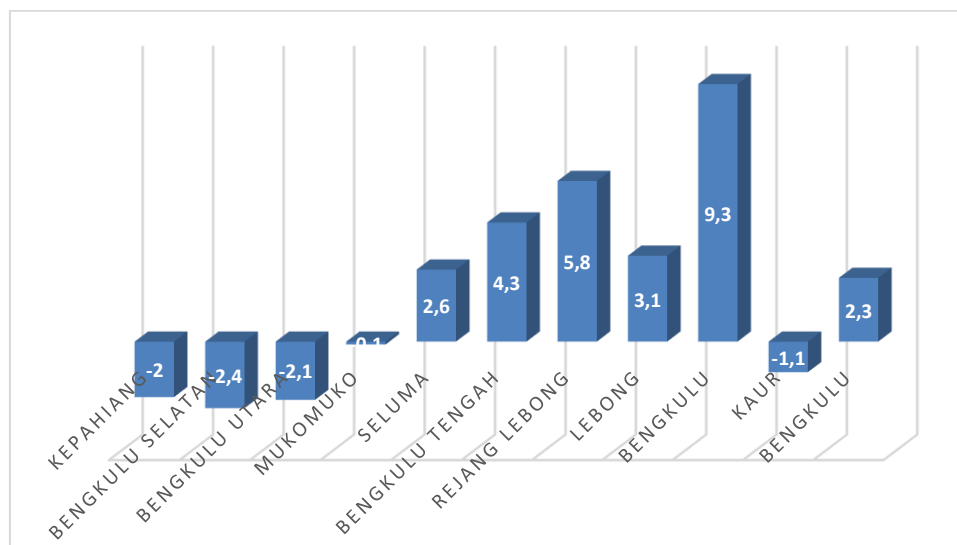
There is 1 district that has experienced an increase in the prevalence of stunting, namely Banyu Asin Regency with an increase of 2.8%. In general, for the South Sumatra Province level, the stunting prevalence rate in 2022 is 18.6% with a decrease of 6.2%. This figure has not yet reached the national target of <14%. The following is the trend of the prevalence of stunting in Bengkulu Province for 2021-2022 which consists of data per city district and provincial data as follows:

**Table 2.** Stunting Prevalence Trends in Bengkulu Province

No	Regency/City	Prevalence Trends		
		2021 (%)	2022 (%)	Decrease/Increase Amount (%)
1	Kepahiang	22,9	24,9	-2
2	Bengkulu Selatan	20,8	23,2	-2.4
3	Bengkulu Utara	20,7	22,8	-2.1
4	Mukomuko	22,2	22,3	-0.1
5	Seluma	24,7	22,1	2.6
6	Bengkulu Tengah	25,5	21,2	4.3

No	Regency/City	Prevalence Trends		
		2021 (%)	2022 (%)	Decrease/Increase Amount (%)
7	Rejang Lebong	26,0	20,2	5.8
8	Lebong	23,3	20,2	3.1
9	Bengkulu	22,2	12,9	9.3
10	Kaur	11,3	12,4	-1.1
	Bengkulu	22,1	19,8	2.3

From the data above it is known that in 2022 there will be a decrease in the prevalence of stunting in urban districts in Bengkulu Province. The highest reduction in stunting prevalence was Bengkulu City with a decrease of 9.3% and the lowest prevalence reduction was Seluma Regency with 2.6%. There are 5 districts in Bengkulu Province which have not experienced a decline, in fact the prevalence of stunting in these 5 districts is increasing. The regencies with an increase in the prevalence of stunting were Kepahiang by 2%, South Bengkulu by 2.4%, North Bengkulu by 2.1%, Mukomuko by 0.1%, Kaur by 1.1%.



**Figure 3.** Magnitude of Increase/Decrease in the Stunting Prevalence Rate in Bengkulu Province

Generally, for the Bengkulu Province level, the stunting prevalence rate in 2022 is 19.8% with a decrease of 2.3%. This figure has not yet reached the national target of <14%.

The success of the local government's intervention program can be evaluated by the decline in the prevalence of stunting that occurred in a number of urban districts in the Provinces of South Sumatra and Bengkulu. All work sectors are concentrating on reducing stunting in accordance with the responsibilities and work functions of each OPD through the Team for the Acceleration of Stunting Reduction (TPPS), which has been established. Stunting prevention initiatives need to be implemented in an integrated manner with targeted and sensitive nutritional interventions (Nugroho et al., 2023). The health sector is responsible for carrying out specific nutrition interventions, such as providing food and nutritional intake for stunted infants and toddlers, giving Fe tablets to pregnant and young women, performing prenatal exams (ANC), weighing pregnant women at posyandu, giving supplemental food (PMT) to toddlers and pregnant women with KEK, performing postpartum exams (PNC), and educating people about balanced nutrition. It is intended that education will alter behavior such that the knowledge acquired can be used in daily life (Ahmad et al., 2023). To produce a generation that is healthy and intellectual, PHBS application must be enhanced. Currently, various connected agencies in the areas of family planning, social assistance, health insurance coverage, access to clean water, and PHBS are in charge of overseeing interventions for sensitive nutrition (Harahap et al., 2023).

According to research conducted by Muthia et al., (2019), prevention of stunting through specific nutritional intervention programs has not reduced stunting below 20% (Muthia et al., 2020). This is due to the necessity of integrating targeted nutrition interventions with sensitive nutrition interventions in order to prevent stunting. Stunting is reduced by 30% as a result of specific nutritional interventions, and by 70%

as a result of sensitivity measures. One of the initiatives the Indonesian government has adopted to combat the issue of stunting is the sensitive nutrition intervention strategy, whose execution involves a number of stakeholders. This strategy is thought to be able to reduce the issue of stunting by 70% (Lailia et al., 2021). Research by Nugroho et al., (2023) states that specific interventions carried out by providing complete, balanced nutritious food for 90 days to stunted toddlers can reduce the prevalence of stunting by 36.6% (Nugroho et al., 2021).

Cross-sector cooperation and comprehensive implementation are required for stunting prevention. Policies and rules that are in place at the federal level must also be followed by follow-up measures at the regional and local levels, all the way down to the village level, and they must not just involve the health sector but also other linked sectors (Nisa, 2018). Sensitive interventions are a range of non-health development initiatives aimed towards the general public. The UNICEF model for addressing nutrition issues encompasses programs for economic growth and poverty alleviation, business involvement, conflict resolution, and environmental protection. Research on sensitive nutrition interventions conducted by Picauly (2021) indicates that approximately 50–60% of OPD have successfully implemented stunting convergence actions, all of which have a significant impact on the degree of coverage of sensitive nutrition intervention programs. Sensitive nutrition interventions cover the non-health sector (Picauly, 2021).

Environmental health interventions (clean Friday and Sunday programs, creating biopore holes, constructing communal septic tanks), poverty alleviation interventions (direct cash assistance/BLT, family hope, national program funds for national empowerment/PNPM), and women's empowerment interventions (counseling and training on health and nutrition, provision of seed plants for environmental use) are a few examples of sensitive nutrition interventions carried out by the non-health sector (Rosha et al., 2016).

Stunting prevention initiatives are supported by KB Village in a considerate way. This study demonstrates the efficacy of leading a clean, healthy lifestyle (PHBS) and the contribution of dads to child care. Although the other two factors were ineffective, it should be highlighted that most aspects of household life planning and responsive parenting exhibit positive outcomes (Setyawati & Ramadha, 2020). Integration between specific and sensitive interventions in efforts to improve toddlers should be done so that the handling of nutritional problems can be sustainable (Rosha et al., 2016).

#### D. Conclusion

From the results and discussion above it is known that the decline in the prevalence of stunting from 2021–2022 in the Province of South Sumatra is 6.2% and the Province of Bengkulu is 2.3%, but not all urban districts have experienced a decrease in the prevalence of stunting. The districts in South Sumatra Province that experienced an increase in the prevalence of stunting were Banyu Asin by 2.8% and there were five districts in Bengkulu Province which also experienced an increase in the prevalence of stunting namely Kepahiang by 2%, South Bengkulu by 2.4%, North Bengkulu by 2.1%, Mukomuko 0.1%, Kaur 1.1%. It can be concluded that the prevalence of stunting in the Provinces of South Sumatra and Bengkulu in general has decreased, but there are 6 districts in the two provinces that are still experiencing an increase in the prevalence of stunting. It is suggested to the competent authorities in the 6 regencies to improve specific nutrition interventions and sensitive nutrition interventions by means of convergence between regional apparatus organizations (OPD) through the Team for the Acceleration of Stunting Reduction (TPPS) in each city-district.

#### E. Acknowledgement

Thanks to the Ministry of Health of the Republic of Indonesia and various parties who have supported this research activity.

#### References

- Ahmad, H., Antoni, A., & Muhamad, Z. (2023). Edukasi Gizi Seimbang Pada Anak di SD Negeri Pijorkoling Kota Padangsidimpuan. *ABDIGERMAS: Jurnal Ilmiah Pengabdian Kepada Masyarakat Bidang Kesehatan*, 1(1), 1–6. <https://doi.org/https://doi.org/10.58723/abdigermas.v1i1.2>
- Harahap, Y. W., Ahmad, H., & Aritonang, S. (2023). Penyuluhan Perilaku Hidup Bersih dan Sehat Sekolah di SD Negeri Ujung Gurap Tahun 2022. *ABDIGERMAS: Jurnal Ilmiah Pengabdian Kepada Masyarakat Bidang Kesehatan*, 1(1), 18–23. <https://doi.org/https://doi.org/10.58723/abdigermas.v1i1.7>
- Kemenkes RI. (2022). Survei Status Gizi SSGI 2022. *BKPK Kemenkes RI*, 1–156.

- Lailia, I., Kismartini, & Rahman, A. Z. (2021). Peran Stakeholders dalam Implementasi Kebijakan Intervensi Gizi Sensitif di Kota Semarang. *Journal Of Public Policy And Management Review*, 10(July), 1–23. <https://doi.org/10.14710/jppmr.v10i3.31228>
- Martha, E., Nadira, N. A., Sudiarti, T., Mayangsari, A. P., Enjaini, E. F., Ryanthi, T. P., Bangun, D. E., Indonesia, U., Indonesia, K. U., & Depok, K. (2020). The Empowerment Of Cadres And Medicasters In The Early Detection And Prevention Of Stunting. *The Indonesian Journal Public Health*, 15(2), 153–161. <https://doi.org/10.20473/ijph.v115i1.2020.153-161>
- Muthia, G., Edison, E., & Yantri, E. (2020). Evaluasi Pelaksanaan Program Pencegahan Stunting Ditinjau dari Intervensi Gizi Spesifik Gerakan 1000 HPK Di Puskesmas Pegang Baru Kabupaten Pasaman. *Jurnal Kesehatan Andalas*, 8(4), 100–108. <https://doi.org/10.25077/jka.v8i4.1125>
- Nisa, L. S. (2018). Kebijakan Penanggulangan Stunting di Indonesia. *Jurnal Kebijakan Pembangunan*, 13(2), 173–179. [Google Scholar](https://doi.org/10.25077/jka.v8i4.1125)
- Nugroho, M. R., Armeidi, E., & Humsi, F. (2023). Balanced Nutritious Staple Foods as Spesific Interventions for Stunting Children. *ABDIGERMAS: Jurnal Ilmiah Pengabdian Kepada Masyarakat Bidang Kesehatan*, 1(1), 24–29. <https://doi.org/10.58723/abdigermas.v1i1.11>
- Nugroho, M. R., Sasongko, R. N., & Kristiawan, M. (2021). Faktor-faktor yang Mempengaruhi Kejadian Stunting pada Anak Usia Dini di Indonesia. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2), 2269–2276. <https://doi.org/10.31004/obsesi.v5i2.1169>
- Picauly, I. (2021). Pengaruh Pelaksanaan Aksi Konvergensi Stunting Terhadap Cakupan Program Intervensi Gizi Sensitif Di Propinsi Nusa Tenggara Timur. *Jurnal Pangan Gizi Dan Kesehatan*, 10(2), 71–85. <https://doi.org/10.51556/ejpazih.v10i2.156>
- Popkin, B. M., Corvalan, C., & Grummer-Strawn, L. M. (2020). Dynamics of the Double Burden of Malnutrition and the Changing Nutrition Reality. *Lancet*, 395(10217), 65–74. <https://doi.org/10.1053/j.gastro.2016.08.014>
- Rahmadhita, K. (2020). Permasalahan Stunting dan Pencegahannya. *Jurnal Ilmiah Kesehatan Sandi Husada*, 11(1), 225–229. <https://doi.org/10.35816/jiskh.v11i1.253>
- Rosha, B. C., Sari, K., SP, I. Y., Amaliah, N., & Utami, N. H. (2016). Peran Intervensi Gizi Spesifik dan Sensitif dalam Perbaikan Masalah Gizi Balita di Kota Bogor. *Buletin Penelitian Kesehatan*, 44(2). <https://doi.org/10.22435/bpk.v44i2.5456.127-138>
- Ruaida, N. (2018). Gerakan 1000 Hari Pertama Kehidupan Mencegah Terjadinya Stunting (Gizi Pendek) di Indonesia. *Global Health Science*, 3(1), 139–151. <https://doi.org/http://dx.doi.org/10.33846/ghs.v3i2.245>
- Setyawati, V. A. V., & Ramadha, F. (2020). Pengaruh kampung KB pada intervensi gizi sensitif stunting di Desa Janegara. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 9(1), 42–47. <https://doi.org/10.14710/jgi.9.1.42-47>

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Indonesian Journal of Health Research and Development

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